

FROM R. T. Cheng
TO H. E. Runion
SUBJECT 1978 INDUSTRIAL HYGIENE HIGHLIGHTS FOR YOUR PRESENTATION

IN REPLY
REFER TO RTC:79-18

DATE Jan. 15, 1979

I. GS&T

Air pollution emission and occupational benzene exposures of service station attendants were evaluated at service stations equipped with Gulf's Hastec vacuum-assisted vapor recovery system. Results of our tests confirm tests conducted by U.S. EPA and NIOSH that Hastec system reduces gasoline vapor emission and benzene exposures.

II. GMRC

A. Mt. Taylor Mine

Conducted an occupational heat exposure study at Mt. Taylor Uranium Mine underground at 3200 feet level. Results show miners under severe heat stress. Remedy measures recommended include frequent and ample intake of potable water, appropriate work-rest schedules, removal of the impervious rain gear, trying out the pre-frozen jacket, etc. Presently, workers are wearing the pre-frozen jacket with good success.

B. Rio Blanco Oil Shale Company

A proposed comprehensive industrial hygiene and radiation health physics program was accepted by Rio Blanco Oil Shale Company. During Phase I, Mining Phase, of RBOSC, major I.H. concerns are occupational exposures to free silica dusts (shale contain 20% free silica), and potential hydrogen sulfide intoxication (mine water contains a high concentration of dissolved H₂S).

C. SRC Project

Completed an annual interim report for the SRC Pilot Plant Industrial Hygiene Monitoring Program. In general, results indicate that SRC II Process is cleaner than SRC I, with respect to occupational dust and fumes exposures.

III. GORAM

A. Industrial Asphalt

Ten thousand pounds of asbestos fibers were used each day at IA Sealcoat Division. Asbestos surveys conducted to assess both occupational exposures and environmental pollutions. Due to stringent engineering control, I A is in compliance with current OSHA standard. No significant concentration of asbestos was detected at plant's boundary lines.

B. Asia Operations

Comprehensive industrial hygiene reports were submitted to Korea Oil Corporation and Chinese Petroleum Corporation following surveys conducted in late 1977. As recommended, trainees from these two companies arrived in the U. S. and completed a two-month intensive industrial hygiene training program sponsored by our Department.

IV. GOCHEM - Asia

China Gulf Plastics Corporation

A comprehensive Industrial Hygiene report was written on CGPC. Briefly, conditions at CGPC have been improved. Time-weighted average vinyl chloride exposures were reduced to approximately 10 ppm. Mercury exposures were within U.S. Standards. Further progress is required for reduction of workplace solvent vapors and toxic metal dusts. A review of China Gulf Plastics inventory of dyes and pigments indicates that two currently in use are benzidine-derived, which recently were classified as human carcinogens by NIOSH and NCI.

V. GENERAL ATOMIC

Several Operation Permits granted from San Diego County Air Pollution Control District for air emission sources. The District also decided to make an exception to their requirements for the construction of source-testing facilities (platforms, scaffolding, testing ports, railings, etc.) for the emission control system at GA's Medical Product Division. This decision saved General Atomic a few thousand dollars in construction costs.

VI. PLANNED 1979 ACTIVITIES

A. GORAM

1. Asbestos and asphalt fumes survey at Industrial Asphalt
2. Visit Korea Oil and Chinese Petroleum to evaluate progress of I.H. programs and key persons.
3. Benzene, lead, arsenic surveys at Santa Fe Springs Refinery

B. GOCHEM

1. Surprise GOCHEM audit
2. Visit China Gulf Plastics and Asian Polymer to review I.H. progress.

B. GMRC

1. Coal mine survey
2. Free silica H₂S survey at Rio Blanco
3. Maintaining SRC monitoring program

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RTC/aln

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